Patent claims

1. A method for coating articles, in particular sanitary articles, such as sanitary fittings, having at least partly metallic surfaces, wherein
   - optionally at least one pretreatment step for activating the metallic surfaces is carried out,
   - at least one organosilane is applied to the metallic surfaces by the so-called sol-gel method, and
   - the coating thus obtained is converted into a polysiloxane coating.

2. The method as claimed in claim 1, characterized in that the conversion of the coating into a polysiloxane coating is carried out by thermal treatment at temperatures of < 100°C, preferably < 70°C.

3. The method as claimed in claim 1 or claim 2, characterized in that the thickness of the polysiloxane coating is < 5 µm, preferably < 1 µm.

4. The method as claimed in any of the preceding claims, characterized in that an organosilane mixture, preferably a mixture consisting of two organosilanes, is applied to the metallic surfaces.

5. The method as claimed in any of the preceding claims, characterized in that the organosilane or the organosilane mixture is used as a colloidal aqueous solution, in particular having a solids content of from 1% by weight to 30% by weight.

6. The method as claimed in any of the preceding claims, characterized in that a fluoroalkylsilane, in particular a modified one, preferably in

aqueous solution, is used as the organosilane.

7. The method as claimed in claim 6, characterized in that the silane is 1H,1H,2H,2H-perfluorooctyl-triethoxysilane or 1H,1H,2H,2H-perfluorodecyl-triethoxysilane.

8. The method as claimed in any of the preceding claims, characterized in that a (poly)alkoxysilylalkane, preferably 1,2-bistriethoxysilylethane, is used as the organosilane.

9. The method as claimed in claim 8, characterized in that an organosilane mixture comprising a modified fluoroalkylsilane, preferably comprising 1H,1H,2H,2H-perfluorooctyltriethoxysilane or comprising 1H,1H,2H,2H-perfluorodecyltriethoxy-silane, and a (poly)alkoxysilylalkane, preferably 1,2-bistriethoxysilylethane, is used.

10. The method as claimed in any of the preceding claims, characterized in that the metallic surfaces are present on a plastics body, preferably a plastics body comprising ABS.

11. The method as claimed in any of claims 1 to 9, characterized in that the metallic surfaces are present on a body comprising stainless steel, aluminum, die cast zinc or preferably brass.

12. The method as claimed in any of the preceding claims, characterized in that the metallic surfaces are those comprising nickel, palladium-nickel (PdNi), nickel-tungsten (NiW) or chromium.

13. The method as claimed in any of claims 1 to 11, characterized in that the metallic surfaces are those comprising copper or comprising a noble

metal, preferably comprising silver or gold.

14. The method as claimed in any of the preceding claims, in particular as claimed in claim 13, characterized in that a so-called primer is applied to the metallic surfaces before application of the organosilane.

15. The method as claimed in claim 14, characterized in that the primer is a long-chain, ω-functionalized mercaptan.

16. The method as claimed in claim 15, characterized in that the chain of the primer is composed of methylene units and/or ethylene glycol units.

17. The method as claimed in claim 15 or claim 16, characterized in that the primer is 11-mercapto-1-undecanol.

18. An article, preferably a sanitary article, such as a sanitary fitting, which can be produced by a method as claimed in any of the preceding claims.

19. The article, preferably the sanitary article, such as a sanitary fitting, in particular as claimed in claim 18, characterized in that it has the following composition:
- a brass body or a plastics body, preferably comprising ABS,
- at least one metal coat, in particular comprising nickel, palladium-nickel (PdNi), nickel-tungsten (NiW) or chromium, present on the body, and
- a polysiloxane coating present on the metal coat.

20. The article, preferably the sanitary article, such as a sanitary fitting, in particular as claimed in

claim 18 or claim 19, characterized in that it has the following composition:

- a brass body or a plastics body, preferably comprising ABS,
- at least one metal coat, in particular comprising copper, nickel, palladium-nickel (PdNi), nickel-tungsten (NiW) or chromium, present on the body,
- a coat of silver or gold present on the metal coat,
- a primer coat, preferably comprising a long-chain, ω-functionalized mercaptan, present on the silver or gold coat, and
- a polysiloxane coating present on the primer coat.

21. The article as claimed in any of claims 18 to 20, characterized in that it has the following composition:

- a plastics body, preferably comprising ABS,
- a nickel coat present on the plastics body, and
- a polysiloxane coating present on the nickel coat.

22. The article as claimed in any of claims 18 to 20, characterized in that it has the following composition:

- a brass body,
- a nickel coat present on the brass body, and
- a polysiloxane coating present on the nickel coat.

23. The article as claimed in any of claims 18 to 20, characterized in that it has the following composition:

- a plastics body, preferably comprising ABS,
- a nickel coat present on the plastics body,
- a silver coat present on the nickel coat,
- a primer coat, preferably comprising a long-

chain, ω-functionalized mercaptan, present on the silver coat, and
- a polysiloxane coating present on the primer coat.

24. The article as claimed in any of claims 18 to 20, characterized in that it has the following composition:
- a brass body,
- a nickel coat present on the brass body,
- a silver coat present on the nickel coat,
- a primer coat, preferably comprising a long-chain, ω-functionalized mercaptan, present on the silver coat, and
- a polysiloxane coating present on the primer coat.

25. The article as claimed in any of claims 18 to 24, characterized in that the polysiloxane coating has a coat thickness of < 5 µm, preferably < 1 µm.

26. A composition for coating articles, in particular sanitary articles, characterized in that it is an organosilane mixture comprising at least one, in particular modified fluoroalkylsilane, preferably comprising 1H,1H,2H,2H-perfluorooctyltriethoxy-silane or comprising 1H,1H,2H,2H-perfluorodecyl-triethoxysilane, and a (poly)alkoxysilylalkane, preferably 1,2-bistriethoxysilylethane.